



Drinking Water Regulations and Health Advisories



DRINKING WATER REGULATIONS AND HEALTH ADVISORIES

by

**Office of Water
U.S. Environmental Protection Agency
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LEGEND

Abbreviations column descriptions are:

- MCLG:** Maximum Contaminant Level Goal. A non-enforceable concentration of a drinking water contaminant that is protective of adverse human health effects and allows an adequate margin of safety.
- MCL:** Maximum Contaminant Level. Maximum permissible level of a contaminant in water which is delivered to any user of a public water system.
- RfD:** Reference Dose. An estimate of a daily exposure to the human population that is likely to be without appreciable risk of deleterious effects over a lifetime.
- DWEL:** Drinking Water Equivalent Level. A lifetime exposure concentration protective of adverse, non-cancer health effects, that assumes all of the exposure to a contaminant is from a drinking water source.

The codes for the Status Reg and Status HA columns are as follows:

F	final
D	draft
L	listed for regulation
P	proposed
T	tentative (not officially proposed)

Other codes found in the table include the following:

NA	not applicable
PS	performance standard 0.5 NTU-1.0 NTU
TT	treatment technique

Large discrepancies between Lifetime and Longer-term HA values may occur because of the Agency's conservative policies, especially with regard to carcinogenicity, relative source contribution, and less-than-lifetime exposures in chronic toxicity testing. These factors can result in a cumulative UF (uncertainty factor) of up to 5 to 5000 when calculating a Lifetime HA.

These regulations and health advisory tables are revised approximately every 6 months by EPA's Office of Water. The tables may also be accessed on the Internet in the near future. The tables may be accessed from the Office of Science and Technology home page at:

<http://www.epa.gov/OST>.

Although no permanent mailing list is kept, copies may be ordered free of charge from the:

SAFE DRINKING WATER HOTLINE
1-800-426-4791
Monday thru Friday, 9:00 AM to 5:30 PM EST.

Publication numbers for the supportive technical documentation for the health advisories can be found on the Internet at:

<http://www.wpa.gov/OST/pc/dwha.html>

Copies of the supportive technical documentation for the health advisories can be order on the Internet at:

<http://www.epa.gov/OST/orderpubs.html>

or obtained for a fee from the:

Educational Resource Information Center (ERIC)
1929 Kenny Road
Columbus, OH 43210-1080
Telephone number (614) 292-6717
FAX (614) 292-0263
e-mail ERICSE@osu.edu
Payment by Purchase Order/check/Visa or Mastercard.

The Health Advisories available and their ERIC order numbers are included at the end of this publication. For further information regarding the Drinking Water Regulations and Health Advisories, call Barbara Corcoran in EPA's Office of Water at (202) 260-1332.

The scheme for categorizing chemicals according to their carcinogenic potential is as follows:*

Group A: Human carcinogen	Sufficient evidence in epidemiologic studies to support causal association between exposure and cancer
Group B: Probable human carcinogen	Limited evidence in epidemiologic studies (Group B1) and/or sufficient evidence from animal studies (Group B2)
Group C: Possible human carcinogen	Limited evidence from animal studies and inadequate or no data in humans
Group D: Not classifiable	Inadequate or no human and animal evidence of carcinogenicity
Group E: No evidence of carcinogenicity for humans	No evidence of carcinogenicity in at least two adequate animal tests in different species <i>or</i> in adequate epidemiologic and animal studies

Drinking Water Health Advisories (HAs) are defined as follows:

One-day HA:	The concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for up to 5 consecutive days of exposure, with a margin of safety.
Ten-day HA:	The concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects up to 14 consecutive days of exposure, with a margin of safety.
Long-term HA:	The concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects up to approximately 7 years (10% of an individual's lifetime) of exposure, with a margin of safety.
Lifetime HA:	The concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects over a lifetime of exposure, with a margin of safety.

*EPA is in the process of revising the Cancer Guidelines.

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Chemicals	Standards						Health Advisories						Cancer Group
	Status Reg.	MCLG (mg/l)	MCL (mg/l)	Status HA	One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	RID (mg/kg/day)	DINEL (mg/l)	Lifetime (mg/l)	mg/L at 10 ⁴ mg/l	Cancer Risk	
ORGANICS													
Acenaphthene	-	-	-	-	-	-	-	-	-	-	-	-	B2
Acfloufen	T	zero	TT	F	2	2	0.1	0.4	0.013	0.4	-	-	B2
Acrylamide	F	zero	-	F	15	0.3	0.02	0.07	0.002	0.007	-	-	B2
Acrylonitrile	T	zero	-	D	-	-	-	-	-	-	-	-	B1*
Adipate (diethylhexyl)	F	0.4	0.4	F	0.002	0.1	-	-	-	-	-	-	C
Alachlor	F	zero	0.007	D	20	20	20	60	0.6	20	0.4	0.04	B2
Aldicarb**	D	0.007	0.007	D	-	-	-	-	0.001	0.035	0.007	-	D
Aldicarb sulfone***	D	0.007	0.007	D	-	-	-	-	0.001	0.035	0.007	-	D
Aldicarb sulfoxide***	D	0.007	0.007	D	-	-	-	-	0.001	0.035	0.007	-	D
Aldrin	-	-	-	D	0.0003	0.0003	0.0003	0.0003	0.0003	0.001	-	-	B2
Ametryn	-	-	-	F	9	9	0.9	3	0.009	0.3	0.06	-	D
Ammonium sulfamate	-	-	-	F	20	20	20	80	0.28	8	2	-	D
Anthracene (PAH)***	F	0.003	0.003	F	0.1	0.1	0.05	-	0.3	-	-	-	D
Atrazine	F	0.003	0.003	F	0.04	0.04	0.04	0.04	0.004	0.1	0.003	-	C
Baygon	-	-	-	F	0.02	0.02	0.02	-	0.032	1.0	0.2**	-	B2
Bentazon	T	-	-	F	0.02	0.02	0.02	-	-	-	-	-	A
Benz(a)anthracene (PAH)	F	zero	0.005	F	-	-	-	-	-	-	-	-	B2*
Benzene	F	zero	0.0002	F	-	-	-	-	-	-	-	-	B2
Benzo(a)pyrene (PAH)	F	-	-	F	-	-	-	-	-	-	-	-	D
Benzo(b)fluoranthene (PAH)	F	-	-	F	-	-	-	-	-	-	-	-	B2
Benzo(g,h,i)perylene (PAH)	-	-	-	-	-	-	-	-	-	-	-	-	D
Benzo(k)fluoranthene (PAH)	-	-	-	-	-	-	-	-	-	-	-	-	B2
bis-2-Chloroisopropyl ether	-	-	-	-	-	-	-	-	-	-	-	-	D
Bromacil	L	-	-	L	-	-	-	-	-	-	-	-	C
Bromobenzene	L	-	-	D	-	-	-	-	-	-	-	-	-

* Under review.

**NOTE: The HA value or the MCLG/MCL value for any two or more of these three chemicals should remain at 0.007 mg/L because of similar mode of action.

***PAH = Polycyclic aromatic hydrocarbon

*See 40CFR Parts 141 and 142

**Revised value based on change in RID

NOTE: Anthracene and Benzo(g,h,i)perylene — not proposed in Phase V.

NOTE: Changes from the last version are noted in Italic and Bold Face print.

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Chemicals	Standards			Health Advisories						Cancer Group	
	Status Reg.	MCLG (mg/l)	MCL (mg/l)	Status HA	One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	RID (mg/kg/day)	DNEL (mg/l)	Lifetime (mg/l)	
Bromoacetonitrile	T	-	-	D	-	-	-	-	-	-	-
Bromochloromethane	P	zero	0.1*0.08*	F	0.1	1	0.1	0.5	0.013	0.05	0.01
Bromodichloromethane (THM)	P	zero	0.1*0.08*	D	6	6	4	13	0.02	0.7	-
Bromoform (THM)	P	zero	0.1*0.08*	D	5	2	2	6	0.02	0.7	-
Bromomethane	T	-	-	D	0.1	0.1	0.1	0.5	0.001	0.06	B2
Butyl benzyl phthalate (PAE)**	-	-	-	F	-	-	-	0.2	-	-	B2
Butylate	-	-	-	F	2	2	1	4	0.05	2	D
Butylbenzene n-	-	-	-	D	-	-	-	-	-	-	C
Butylbenzene sec-	-	-	-	D	-	-	-	-	-	-	D
Butylbenzene tert-	-	-	-	D	-	-	-	-	-	-	-
Carbamyl	-	-	-	F	1	1	1	1	0.1	4	D
Carboxurah	E	0.04	0.04	F	0.05	0.05	0.05	0.2	0.005	0.2	E
Carbon tetrachloride	F	zero	0.005	F	4	0.2	0.07	0.3	0.007	0.03	B2
Captoxin	-	-	-	F	1	1	1	4	0.1	4	D
Chloral hydrate	P	0.04	0.06**	D	7	0.2	0.2	0.6	0.0002	0.06	C
Chloramphen	-	-	-	F	3	3	0.2	0.5	0.015	0.5	D
Chlordane	F	zero	0.002	F	0.06	0.06	-	-	-	-	C
Chlorodibromomethane (THM)	P	0.06	0.1*0.08*	D	6	6	2	8	0.0006	0.002	B2
Chloroethane	L	-	-	D	-	-	-	0.02	0.7	0.06	C
Chloroform (THM)	P	zero	0.1*0.08	D	4	4	0.1	0.4	-	-	B
Chloromethane	L	-	-	F	9	0.4	0.4	1	0.004	0.1	B2
Chlorophenol (2-)	-	-	-	D	0.5	0.5	0.5	2.0	0.005	0.2	C
p-Chlorophenyl methyl sulfide/sulfone/sulfoxide	-	-	-	**	-	-	-	-	-	-	D
Chloropicrin	L	-	-	-	-	-	-	-	-	-	D
Chlorothalonil	-	-	-	F	0.2	0.2	0.2	0.5	0.015	0.5	B2
Chlorotoluene o-	L	-	-	F	2	2	2	7	0.02	0.7	D
Chlorotoluene p-	L	-	-	F	2	2	2	7	0.02	0.7	D
Chlorpyrifos	-	-	-	F	0.03	0.03	0.03	0.1	0.003	0.1	D
Chrysane (PAH)	-	-	-	-	-	-	-	-	-	-	B2
Cyanazine***	T	0.001	-	D	0.1	0.1	0.02	0.07	0.002	0.07	C

* Current MCL. ** A HA will not be developed due to insufficient data. ***Database Deficiency Report has been published.

** 1994 Proposed rule for Disinfectants and Disinfection By-products : Total for all THMs combined cannot exceed the 0.08 level.

** Total for all haloacetic acids cannot exceed 0.03 level. ***PAE = phthalate acid ester ****Draft HA updated for the Phase VI B regulation, which has been postponed. It includes the change of the cancer classification from D to C, thus justifying the use of an additional 10-fold safety factor for the lifetime HA.

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Chemicals	Standards			Health Advisories					
	Status Reg.	MCLG (mg/l)	MCL (mg/l)	10-kg Child			70-kg Adult		
				status HA	One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/l)	DWEL (mg/l)
Cyanogen chloride	T	-	-	-	-	-	-	-	-
Cypermethrin	F	0.07	0.07	D	1	0.3	0.1	0.4	0.01
2,4-D	L	-	-	F	80	80	5	20	0.01
DCPA (Dacthal)	F	0.2	0.2	F	3	3	0.3	0.9	0.026
Dalapon	F	0.4	0.4	-	20	20	0.005	0.6	0.02
Dip(2-ethylhexyl)adipate	F	-	-	F	0.02	0.02	0.02	0.0009	0.003
Diazinon	L	-	-	D	2	2	2	0.02	0.02
Dibromoacetonitrile	-	-	-	F	0.2	0.05	-	-	0.0006
Dibromochloropropane (DBCP)	F	zero	0.0002	-	-	-	-	-	-
Dibromomethane	L	-	-	F	0.3	0.3	0.3	0.1	0.003
Dimethyltetrachloroethylene	L	-	-	F	0.3	0.3	0.3	0.1	0.003
Dimethyltetrachloroethane	L	-	-	D	-	-	-	-	-
Dimethyltetrachloroformate	P	zero	0.06*	D	1	1	1	0.004	0.1
Dichloroacetaldehyde	L	-	-	D	1	1	1	0.008	0.3
Dichloroacetic acid	L	-	-	D	1	1	0.8	3	0.006
Dichloroacetonitrile	F	0.6	0.6	F	9	9	9	30	0.09
Dichlorobenzene o-	F	-	-	F	9	9	9	30	0.09
Dichlorobenzene m-	F	0.075	0.075	F	10	10	10	40	0.01
Dichlorobenzene p-	F	-	-	F	40	40	9	30	0.075
Dichlorodifluoromethane	L	-	-	F	40	40	9	30	0.01
Dichloroethane (1,2)	F	zero	0.005	F	0.7	0.7	0.7	2.6	0.02
Dichloroethylene (1,1)	F	0.007	0.007	F	2	1	1	4	0.009
Dichloroethylene (cis-1,2)	F	0.07	0.07	F	4	3	3	11	0.01
Dichloroethylene (trans-1,2)	F	0.1	0.1	F	20	2	2	6	0.02
Dichloromethane	F	zero	0.005	F	10	2	2	0.06	2
Dichlorophenol (2,4)	-	-	-	D	0.03	0.03	0.1	0.003	0.1
Dichloropropane (1,1)	-	-	-	D	-	-	-	-	0.02
Dichloropropane (1,2)	F	zero	0.005	F	-	-	-	-	0.06
Dichloropropane (1,3)	L	-	-	D	-	-	-	-	B2

* The values for m-dichlorobenzene are based on data for o-dichlorobenzene.

** A quantitative risk estimate has not been determined.

** Total for all halocacetic acids cannot exceed 0.06 level.

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Chemicals	Standards				Health Advisories						Cancer Group
	Status Reg.	MCL G (mg/l)	MCL (mg/l)	Status HA	One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	RID (mg/kg/day)	DNEL (mg/l)	Lifetime (mg/l)	
Dichloropropane (2,2-)	L	-	-	D	-	-	-	-	-	-	-
Dichloropropane (1,1-)	L	-	-	D	0.03	0.03	0.03	0.0003	0.01	-	B2
Dichloropropene (1,3-)	T	zero	-	F	0.0005	0.0005	0.0005	0.00005	0.002	0.0002	B2
Diethyl phthalate (PAE)	-	-	-	D	-	-	-	0.8	30	5	D
Diethylene glycol dinitrate	-	-	-	*	-	-	-	-	-	-	-
Di(2-ethylhexyl)phthalate (PAE)	F	0.006	D	F	8	8	8	0.02	0.7	-	B2
Disopropyl methylphosphonate	-	-	-	F	10	10	10	40	0.3	10	D
Dimethrin	-	-	-	F	2	2	2	6	0.2	2	D
Dimethyl(methyl)phosphonate	-	-	-	F	-	-	-	-	-	-	C
Dimethyl phthalate (PAE)	-	-	-	F	0.04	0.04	0.04	0.001	0.005	0.001	D
1,3-Dinitrobenzene	L	-	-	F	0.50	0.50	0.30	1	0.002	0.1	B2
Dinitrotoluene (2,4-)	L	-	-	F	0.40	0.40	0.40	1	0.001	0.04	B2
Dinitrotoluene (2,6-)	L	-	-	*	-	-	-	-	-	-	-
tg 2,6 & 2,4 dinitrotoluene **	-	-	-	F	0.3	0.3	0.01	0.04	0.001	0.04	B2
Dinosab	F	0.007	D	F	4	4	-	-	-	-	D
Dioxane P	-	-	-	F	0.3	0.3	0.3	0.03	1	0.2	B2
Diphenianil	-	-	-	F	1	1	0.3	1	0.03	1	D
Diphenylamine	-	-	-	F	-	-	-	0.0022	0.08	0.002	D
Diquat	F	0.02	D	F	0.01	0.01	0.003	0.0004	0.001	0.0003	E
Disulfoton	-	-	-	F	0.1	0.4	0.4	1	0.01	0.4	D
Dithiane (1,4-)	-	-	-	F	1	1	0.3	0.9	0.002	0.07	D
Diuron	-	-	-	F	0.8	0.8	0.2	0.02	0.7	0.1	D
Endothal	F	0.1	D	F	0.02	0.02	0.003	0.01	0.003	0.002	D
Endrin	F	0.002	D	F	0.7	TT	0.07	0.002	0.07	0.002	D
Endichlorhydrin	F	zero	-	F	30	3	1	3	0.1	3	B2
Ethylbenzene	F	0.7	D	F	0.008	0.008	1	-	-	-	D
Ethylene dibromide (EDB)	F	286	D	F	20	6	6	20	2	40	B2
Ethyleneglycol	-	-	-	F	0.3	0.3	0.1	0.4	0.0008	0.003	D
ETU	L	-	-	F	0.009	0.009	0.005	0.02	0.0025	0.009	B2
Fenamiphos	-	-	-	F	-	-	-	-	-	-	D

* An HA will not be developed due to insufficient data; a "Database Deficiency Report" has been published.
** tg = technical grade

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Chemicals	Standards				Health Advisories								
	Status Reg.	MCLG (mg/l)	MCL (mg/l)	Status HA	10-kg Child	10-kg Adult	Longer-term (mg/l)	Longer-term (mg/l)	RID (mg/kg/day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁶ Cancer Risk	
Fluorotrichloromethane	B	-	-	F	2	2	2	5	0.013	0.4	0.09	D	
Fluorene (PAH)	B	-	-	F	-	-	-	-	0.04	-	-	D	
Fluorotrichloromethane	B	-	-	D	7	7	3	10	0.3	10	2	D	
Fog Oil	-	-	-	F	0.02	0.02	0.02	0.07	0.002	0.07	0.01	B1**	
Fonofos	-	-	-	D	10	5	5	20	0.15	5	1	E	
Formaldehyde	D	-	-	D	-	-	-	-	-	-	-	D	
Gasoline, unleaded (benzene)	F	0.7	0.7	F	20	20	1	1	0.1	4	0.7	B1**	
Glyphosate	-	-	-	F	0.01	0.01	0.005	0.005	0.005	0.02	0.0008	B2	
Heptachlor	F	0.0004	0.0004	F	0.01	-	0.001	0.001	1E-5	0.0004	0.0004	B2	
Heptachlor epoxide	F	0.0002	0.0002	F	0.05	-	0.05	0.2	0.0008	0.03	0.002	B2	
Hexachlorobenzene	F	0.001	0.001	F	0.3	0.3	0.1	0.4	0.002	0.07	0.001	C	
Hexachlorobutadiene	T	-	-	F	-	-	-	-	0.007	0.2	-	D	
Hexachlorocyclopentadiene	F	0.05	0.05	F	5	5	0.1	0.5	0.001	0.04	0.001	C	
Hexachloroethane	L	-	-	F	10	4	4	10	-	-	-	D	
Hexane (n)	-	-	-	F	3	3	3	9	0.033*	1*	0.2*	D	
Hexazirnone	-	-	-	F	5	5	5	20	0.05	2	0.4	D	
HMX	-	-	-	D	-	-	-	-	-	-	***	B2	
Indeno[1,2,3-c,d]pyrene (PAH)	L	-	-	F	15	15	15	15	0.2	7	0.1	C	
Isophorone	L	-	-	D	30	30	30	100	0.1	4.0	0.7	D	
Isopropyl methylphosphonate	-	-	-	D	-	-	-	-	-	-	-	C	
Isopropylbenzene	-	-	-	F	0.0002	0.0002	1	0.03	0.1	0.0003	0.01	0.0002	D
Lindane	F	-	-	F	0.2	0.2	0.2	0.2	0.02	0.8	0.2	D	
Malathion	-	-	-	F	10	10	5	20	0.5	20	4	D	
Maleic hydrazide	-	-	-	F	0.1	0.1	0.1	0.4	0.0015	0.05	0.01	E	
MCPA	-	-	-	F	0.3	0.3	0.3	0.3	0.025	0.9	0.2	D	
Methomyl	L	-	-	F	0.04	0.04	0.05	0.05	0.05	0.2	0.04	D	
Methoxychlor	-	-	-	F	-	-	-	-	-	-	-	D	
Methyl ethyl ketone*	-	-	-	F	0.3	0.3	0.3	0.1	0.00025	0.009	0.002	D	
Methyl parathion	-	-	-	F	-	-	-	-	-	-	-	D	

* Under review.

** Carcinogenicity based on inhalation exposure.

*** See 40CFR Parts 141 and 142

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Chemicals	Health Advisories										Cancer Group	
	Status Reg.	MCLG (mg/l)	MCL (mg/l)	Status HA	10-kg Child			70-kg Adult				
					One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/l)	RfD (mg/kg/day)	DWEL (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁶ Cancer Risk
Methyl tert butyl ether	L	-	-	D	24	24	3	12	0.03	1.0	0.02-0.2*	C***
Metoachlor	L	-	-	F	2	2	2	5.0	0.1	3.5	0.07	C
Metrizoin	L	-	-	F	5	5	0.3	0.5	0.013**	0.5	0.1	D
Monochloroacetic acid	L	-	-	D	-	-	-	-	-	-	-	D
Monochlorobenzene	F	0.1	0.1	F	2	2	2	7	0.02	0.7	0.1	D
Naphthalene	-	-	-	F	0.5	0.5	0.4	1	0.004	0.1	0.02	D
Nitrocellulose (non-toxic)	-	-	-	F	-	-	-	-	-	-	-	D
Nitroguanidine	-	-	-	F	10	10	10	40	0.1	4	0.7	B
Nitrophenoxy p-	-	-	-	F	0.8	0.8	0.8	3	0.008	0.3	0.06	D
Oxamyl (Ydate)	F	0.2	0.2	F	0.2	0.2	0.2	0.8	0.025	0.9	0.2	E
Paraquat	-	-	-	F	0.1	0.1	0.05	0.2	0.0045	0.2	0.03	E
Pentachloroethane	-	-	-	D	-	-	-	-	-	-	-	D
Pentachlorophenol	-	0.001	-	F	1	0.3	0.3	1	0.03	1	-	B2
Phenanthrenes (PAH)	-	-	-	D	6	6	6	20	0.6	20	4	D
Phenol	-	0.5	0.5	F	20	20	0.7	2	0.07	2	0.5	D
Picloram	F	zero	0.0005	P	-	-	-	-	-	-	-	D
Polychlorinated biphenyls (PCBs)	F	-	-	F	0.2	0.2	0.2	0.5	0.015*	0.5	0.1*	B2
Prometon	L	-	-	F	0.8	0.8	0.8	3	0.075	3	0.05	D
Pronamide	-	-	-	F	0.6	0.5	0.1	0.8	0.013	0.5	0.09	C
Propachlor	-	-	-	F	1	1	0.5	2	0.02	0.7	0.01	D
Propazine	-	-	-	F	5	5	5	20	0.02	0.6	0.1	C
Propham	-	-	-	D	-	-	-	-	-	-	-	D
Propylbenzene n-	-	-	-	-	-	-	-	-	-	-	-	D
Pyrene (PAH)	-	-	-	-	-	-	-	-	-	-	-	D
RDX	-	0.004	0.004	F	0.1	0.1	0.1	0.4	0.003	0.1	0.002	C
Slimazine	F	0.1	0.1	F	0.07	0.07	0.07	0.07	0.005	0.2	0.004	C
Styrene	F	zero	3E-08	F	20	2	2	7	0.2	7	0.1	C
2,4,5-T	-	-	-	-	0.8	0.8	0.8	0.1	0.01	0.35	0.07	D
2,3,7,8-TCDD (Dioxin)	F	-	-	1E-06	1E-07	1E-07	4E-08	1E-08	4E-08	1E-08	2E-08	B2

* Under review. NOTE: Phenanthrene — not proposed.

** The RfD for metribuzin was revised Dec. 1994 to 0.013 mg/kg/day. Based on this revised RfD the Lifetime HA would be 0.1 mg/l assuming a 20% relative source contribution for drinking water. This information has not been incorporated in the Health Advisory document.

*** Tentative.

If the cancer classification C is accepted, the lifetime HA is 0.02; otherwise it is 0.200 mg/L

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Chemicals		Health Advisories						Cancer Group				
Status Reg.	MCLG (mg/l)	MCL (mg/l)	Status HA	10 kg Child			70 kg Adult					
				One-day (mg/l)	Ten-day (mg/l)	Longer-term (mg/l)	RD (mg/kg /day)	CWEL (mg/l)	Lifetime (mg/l)			
Tebuthiuron	-	-	F	3	3	0.7	2	0.07	2	0.5	-	D
Terbacil	-	-	F	0.3	0.3	0.3	0.8	0.013	0.4	0.08	-	E
Terbutos	-	-	F	0.005	0.005	0.001	0.005	0.00013	0.005	0.0009	-	D
Tetrachloroethane (1,1,1,2-)	L	-	F	2	2	0.9	3	0.03	1	0.07	0.1	C
Tetrachloroethane (1,1,2,2-)	L	-	D	-	-	-	-	-	-	-	-	-
Tetrachloroethylene	zero	0.005	F	2	2	1	5	0.01	0.6	-	0.07	-
Tetranitromethane	-	-	F	-	-	-	-	-	-	-	-	-
Toluene	F	1	F	20	2	2	7	0.2	7	1	-	D
Toxaphene	F	zero	F	-	-	-	-	-	-	-	-	-
2,4,5-TP	F	0.05	F	0.2	0.2	0.07	0.3	0.0075	0.3	0.05	0.003	B2
1,1,2-Trichloro-1,2,2-trifluoroethane	P	-	-	-	-	-	-	-	-	-	-	-
Trichloroacetic acid	L	0.3	0.06**	D	4	4	4	13	0.1	4.0	0.3	C
Trichloroacetonitrile	F	0.07	0.07	F	0.05	0.05	-	-	-	-	-	D
Trichlorobenzene (1,2,4-)	F	0.07	0.07	F	0.1	0.1	0.1	0.5	0.01	0.04	0.07	D
Trichlorobenzene (1,3,5-)	-	-	F	0.6	0.6	0.6	2	0.006	0.2	0.04	-	D
Trichlorethane (1,1-)	F	0.2	0.2	F	100	40	40	100	0.035	1	0.2	D
Trichlorethane (1,1,2-)	F	0.003	0.005	F	0.6	0.4	0.4	1	0.004	0.1	0.003	C
Trichloroethanol (2,2,2-)	L	-	-	-	-	-	-	-	-	-	-	-
Trichloroethylene	F	zero	0.005	F	-	-	-	-	-	-	0.3	B2
Trichlorophenol (2,4,6-)	L	-	-	D	-	-	-	-	-	-	0.3	B2
Trichloropropene (1,1,1-)	-	-	F	0.6	0.6	0.6	2	0.008	0.2	0.04	0.5	B2
Trichloropropene (1,2,3-)	L	-	F	0.08	0.08	0.08	0.3	0.0075	0.3	0.005	0.5	C
Trifluralin	-	-	D	-	-	-	-	-	-	-	-	-
Trimethylbenzene (1,2,4-)	L	-	D	-	-	-	-	-	-	-	-	-
Trimethylbenzene (1,3,5-)	-	-	F	0.005	0.005	0.005	-	-	-	0.005	-	C
Trinitrophenol	-	-	F	0.02	0.02	0.02	0.02	0.0005	0.02	0.002	0.1	A
Vinyl chloride	F	zero	0.002	F	3	3	0.01	0.05	-	-	0.0015	D
Xylenes	F	10	10	F	40	40	100	2	60	10	-	-

* Under review.

** A HA will not be developed due to insufficient data; a "Database Deficiency Report" has been published.

** Total for all halocarboxylic acids cannot exceed 0.06 mg/l level.

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Chemicals		Standards			10-kg Child			70-kg Adult			Health Advisories			Cancer Group
Status Reg.	MCLG (mg/L)	MCL (mg/L)	Status HA	One-day (mg/L)	Ten-day (mg/L)	Longer term (mg/L)	RIO (mg/kg/day)	DWEL (mg/L)	Lifetime (mg/L)	mgh at 10 ⁻⁶ Cancer Risk				
INORGANICS														
Aluminum	L	-	D	-	-	-	-	-	-	-	D	D	D	D
Amonia	F	0.006	0.006	F	0.01	0.01	-	-	-	-	-	-	-	D
Antimony	*	-	0.05	D	-	-	-	-	-	-	-	-	-	D
Arsenic	F	-	7 MFL	7 MFL	-	-	-	-	-	-	0.002	0.002	A	A
Asbestos (fibers) >10 μ m length	F	2	2	F	-	-	-	-	-	-	700 MFL	700 MFL	A	A
Barium	F	0.004	0.004	D	30	30	-	-	-	-	-	-	-	D
Beryllium	L	-	-	D	4	0.9	4	20	0.005	0.2	-	0.0008	B2	B2
Boron	L	zero	0.01	D	4	0.9	0.9	3	0.09	3	-	-	-	D
Bromate	F	0.005	0.005	F	0.04	0.04	-	-	-	-	-	-	-	D
Cadmium	P	4***	4	D	1	1	1	1	1	1	-	-	-	D
Chloramine	P	-	-	D	-	-	-	-	-	-	-	-	-	D
Chlorate	L	-	-	D	-	-	-	-	-	-	-	-	-	D
Chlorine	P	4	4	D	-	-	-	-	-	-	-	-	-	D
Chlorine dioxide	T	0.3	0.8	D	-	-	-	-	-	-	-	-	-	D
Chlorite	L	0.08	1	D	-	-	-	-	-	-	-	-	-	D
Chromium (total)	F	0.1	0.1	F	1.3	TT**	-	0.2	0.8	0.035	0.1	0.08	0.3	D
Copper (at tap)	F	0.2	0.2	F	0.2	0.2	0.2	0.8	0.022	0.8	0.2	-	-	D
Cyanide	F	4	4	F	4	4	-	-	-	-	-	-	-	D
Fluoride*	P	-	-	F	zero	TT**	-	-	-	-	-	-	-	D
Hypochlorite	P	-	-	F	4	4	-	-	-	-	-	-	-	D
Hypochlorous acid	P	-	-	F	-	-	-	-	-	-	-	-	-	D
Lead (at tap)	L	-	0.002	F	-	-	-	-	-	-	0.002	0.0003	0.01	D
Manganese	F	-	-	D	0.02	0.02	0.01	0.02	0.05	0.05	0.2	0.04	D	D
Mercury (inorganic)	L	0.1	0.1	F	-	-	-	-	-	-	0.02	0.02	D	D
Molybdenum	F	10	10	F	-	-	10*	10*	0.5	0.5	0.6	0.6	D	D
Nickel	F	-	-	-	-	-	-	-	-	-	1.6	-	-	D
Nitrate (as N)	F	-	-	-	-	-	-	-	-	-	-	-	-	D

* Under review.

** Copper — action level 1.3 mg/L, Lead — action level 0.015 mg/L

*** Measured as free chlorine.

1 Regulated as chlorine.

2 In food.

3 In water.

4 Being remanded

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Chemicals	Standards						Health Advisories					
	Status Reg.	MCLG (mg/l)	MCL (mg/l)	Status HA	One-day (mg/l)	One-day (mg/l)	Longer-term (mg/l)	Longer-term (mg/l)	RID (mg/l/day)	Diesel (mg/l)	Lifetime (mg/l)	mg/l at 10 ⁻⁶ Cancer Risk
Nitrite (as N)	F	1	1	F	-	-	-	-	-	-	-	-
Nitrate + Nitrite (both as N)	F	10	10	F	-	-	-	-	-	-	-	-
Selenium	F	0.05	0.05	D	0.2	0.2	0.2	0.2	0.005	0.2	0.1	D
Silver	-	-	-	D	-	-	-	-	-	-	-	D
Sodium	L	-	-	D	25	25	25	90	0.6	90	17	D
Strontium	P	500	500	F	0.002	-	-	-	-	-	-	-
Sulfate	P	0.0005	0.002	F	0.007	0.007	0.007	0.0007	0.0023	0.0005	-	D
Thallium	T	-	-	D	-	-	-	-	-	-	-	D
Vanadium	-	-	-	F	-	-	-	-	0.0002	0.0005	0.0001	D
White phosphorus	L	-	-	D	-	-	-	-	-	-	-	D
Zinc	L	-	-	F	-	-	-	-	-	-	-	D
Zinc chloride (measured as Zinc)	L	-	-	F	-	-	-	-	-	-	-	D
RADIONUCLIDES												
Beta particle and photon activity (formerly man-made radionuclides)	F	++	4.4 rem	-	-	-	-	-	15 pCi/L	-	A	A
Gross alpha particle activity	F	++	15 pCi/L	-	-	-	-	-	5 pCi/L	-	A	A
Combined Radium 226 & 228	F	++	300 pCi/L	-	-	-	-	-	20 pCi/L	-	A	A
Radon*	P	zero	20 pCi/L	-	-	-	-	-	150 pCi/L	-	A	A
Uranium*	P	zero	20 pCi/L	-	-	-	-	-	0.003	-	A	A

* Under review. ** Guidance.

+ 1991 Proposed National Primary Drinking Water Rule for Radionuclides
++ No final MCLG, but zero proposed in 1991.

Secondary Maximum Contaminant Levels

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Chemicals	Status	SMCLs (mg/L)
Aluminum	F	0.05 to 0.2
Chloride	F	250
Color	F	15 color units
Copper	F	1.0
Corrosivity	F	non-corrosive
Fluoride*	F	2.0
Foaming agents	F	0.5
Iron	F	0.3
Manganese	F	0.05
Odor	F	3 threshold odor numbers
pH	F	6.5 — 8.5
Silver	F	0.1
Sulfate	F	250
Total dissolved solids (TDS)	F	500
Zinc	F	5

Status Codes: P — proposed, F — final

* Under review.

Secondary Drinking Water Standards are unenforceable federal guidelines regarding taste, odor, color and certain other non-aesthetic effects of drinking water. EPA recommends them to the States as reasonable goals, but federal law does not require water systems to comply with them. States may, however, adopt their own enforceable regulations governing these concerns. To be safe, check your State's drinking water rules.

Microbiology

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	Status	MCLG	MCL
Cryptosporidium	L	-	-
<i>Giardia lamblia</i>	F	zero	TT
Legionella	F*	zero	TT
Standard Plate Count	F*	NA	TT
Total Coliforms	F	zero	**
Turbidity	F	NA	PS
Viruses	F*	zero	TT

Key: PS, TT, F, defined as previously stated.

- * Final for systems using surface water; also being considered for regulation under groundwater disinfection rule.